

4. Importance of Mathematics in Life Skill Education

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Abstract:

Teachers have an important role and have a significant impact on the standard of education. In today's knowledge-based economy, competition is important, and students must possess a variety of skills in addition to general knowledge to succeed in any sector. Therefore, it is crucial that pupils acquire these fundamental abilities. This paper is about the importance of Mathematics in life skill Education, that can arise in real situations and provide solutions to learning patterns. Including many activities in the teaching methods is beneficial for students' overall growth as well as for learning the subject. In addition to studying mathematics, students also pick up other skills including creativity, teamwork, leadership, communication and presentation. As a result, these actions are excellent for acquiring mathematical abilities and other 21st- century skill knowledge.

Keywords:

Teachers, Mathematics, Life skills, Activities, Knowledge.

4.1 Introduction:

Education is going through a radical transformation in the new century in terms of science and technology. Globalization, privatization, urbanization, industrialization etc. A socially conscious education must be swift and decisively in response to this new challenge. Education is so crucial in today's world, but what matters most is the type of education that can help people live better lives.

Therefore, the primary goal of education must place a great deal of creating such abilities in pupils, since they are crucial components that make up a dynamic citizen capable of navigating the future obstacles and come out on top ((Ravindra Prajapati, 2017).

Nowadays skills in using technology are also life skills. Educational technology is described as “the study and ethical practice of facilitating learning and improving performance by creating using and managing appropriate technological processes and resources” by the Association for Educational Communication and Technology (AECT).

Accurate information gathering, comprehension, creation of new information, and use of the resulting information for problem-solving and decision-making processes are among the most important issues facing today’s educational institutions is to teach pupils how to collect information, interpret the information and produce new information. Instead of merely transmitting already existing knowledge. Understanding the information brings regarding knowledge of information processing abilities. It is easier for students to internalize the material and become more adaptive to changing circumstances when they apply what they have learnt in real-world contexts (Pelin Uredi,2023).

4.2 Life Skills-Based Education:

Life skills-based education (LSBE) is a form of education that focuses on cultivating personal life skills such as self-reflection, critical thinking, problem solving and interpersonal skills.

The seven essential skills for life were Focus and Self-Control, Perspective-Taking, Communication, Making Connections, Critical Thinking, Taking on Challenges, Self-Directed and Engaged Learning.

Three major categories of life skills were:

1. **Thinking skills:** Using analytical abilities, thinking critically and creatively and honing problem-solving techniques, thinking skills are the abilities that improve the logical capacity of the brain enhancing one's capacity for making decisions.
2. **Social skills:** These comprise leadership, interpersonal and communication abilities, advocacy, teamwork, cooperation and managerial abilities among others.
3. **Emotional intelligence:** This refers to the ability to understand and feel at ease with oneself. Consequently, which includes controlling or overstress, moods and emotions as well as defying family and friends.
4. **Psychosocial competencies and interpersonal skills** are taken into consideration in life skills education and training because they enable students to make wise decisions, solve problems, think critically and creatively, communicate effectively, form wholesome relationships, empathize with others, and deal with managing their lives in a healthy and productive way.
5. "WHO defines; Life skills as the abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life". Young minds are thought of as the most productive members of society because of their superior mental and physical faculties. However, in practice, most of them struggle to reach their full potential because they lack direction and drive (Ravindra Prajapati, 2017).

4.2.1 Life Skills-Based Education-NEP 2020:

The National Education Policy of 2020 (NEP 2020) called for all HEIs to implement creative and adaptable credit-based projects and curriculum in the following areas, while emphasizing a more comprehensive and diverse educational system.

The cultivation of humanistic, moral, constitutional and universal human values- truth(satya), moral behavior (dharma), peace (shanti), love(prem), non-violence (ahimsa) and scientific temper is part of value- based education.

The process of acquiring life skills is ongoing and aids in our maturation, confidence-building in our ability to make decisions based on sufficient knowledge and consideration and identification of both internal and external sources of strength. Every culture and community have made investments throughout history to educate and equip the next generation to live happy, responsible lives (Jeevan Kaushal).

Education policy is very focused on the development of the creative potential of each individual. It is based on the principle that education should not only develop cognitive abilities- the “basic abilities” of literacy and numeracy and “higher” cognitive abilities, such as critical thinking and problem solving- but also community, energy and moral and emotional connection. “The vision of the Policy is to instill among the learners a deep-rooted pride in being Indian, not only in thought, but also in spirit, intellect, and deeds, as well as to develop knowledge, skills, values, and dispositions that support responsible commitment to human rights, sustainable development and living, and global well-being, thereby reflecting a truly global citizen”. (14)

4.3 Role of Mathematics- Life Skill Education:

Mathematical abilities are considered a distinct domain that encompasses both nonverbal (math notation, reasoning in time and space and calculation) and verbal (number knowledge, counting, computation and reasoning) components. Various activities, such as reading books, telling stories and teaching the alphabet can promote literacy abilities. Children now comprehend the significance and relevance of the principles they are learning in connection to real-world ideas thanks to our mathematics program.

Youngsters are aware that math is an essential life ability that they will use in many aspects of their everyday lives. Since math is taught as an interesting and fun subject that allows students to explore and ask questions, children have a positive perception of the subject. They also understand that it's okay to make mistakes because the process of solving a problem helps them learn more.

It is possible to promote early numeracy skills through counting, comparing and learning numbers (Murray,2011). A child's academic development is particularly important throughout the early years. That is why mathematics plays a major role in developing life skills-based education.

The two primary areas of early academic accomplishment for children are reading and mathematics. When it comes to children's academic progress during their teenage years, the best indicators are consistent patterns in math and reading abilities (Lechner,2021). Growing awareness of the numbers in a child's surroundings and how they can express quantitative reasoning and aid in problem solving are important aspects of the development of early numeracy skills (Silinskas,2020).

In the early years, proficiency in math can forecast a child's math abilities as they grow older and tends to remain consistent throughout their school years (6). Literacy and numeracy skills are developed in early childhood through engagement with the environment. Schools play a crucial role in nurturing students' interest in literacy as formal educational establishments (Agustina,2020).

The quality of kindergarten school services and educational facilities have a significant impact on the development of literacy and numeracy skills (Susperreguy,2020).

More important to mathematical learning is a thorough comprehension of mathematics than is students, current mastery of the subject and their ability to solve problems correctly.

Problems in real life are the basis of mathematical knowledge and applications and conclusions drawn from this information are intimately entwined with real life. (Dolapçioğlu, S., & Doğanay, A. (2020))

The 2018 Ministry of National Education mathematics curriculum places a strong emphasis on mathematical literacy skills related to the field of proficiency, including the value of mathematical thinking the ability to formulate events mathematically, and the application of mathematical knowledge in drawing conclusions about events, facts and situations (MEB,2018) (11).

More specifically, life skills are cognitive and interpersonal skills that help people make decisions, communicate and develop self-management and critical thinking skills and these only people can build a quality society leading to a developed country. (Naghma Shahida,2023).

The role of education in the 21 st century is different and education should promote: flexibility, creativity, problem solving, technical knowledge, information acquisition and more importantly for life, all preparation for study. But these 21 st century skills must be fully integrated into standards, assessment, curriculum, instruction, professional development and the learning environment. That is life skill education in 21 st century. (Macdonald, G., & Hursh, D, 2006). The demands of the new century require that all students acquire conceptual understanding, mastery of skills and positive attitudes towards mathematics if they are to succeed (Kennedy & Tipps, 2000). The skills we found in mathematics are communication skills, ICT, learning, research and reasoning (Simpson, 2003). Process standards expand thinking/learning skills, problem solving, reasoning and representation, communication, mathematical representation and connections (Kennedy & Tipps, 2000). Learning mathematics is useful in understanding and internalizing basic math concepts through concrete situations.

This expands the core concept and paves the way for better learning of new parts of the concept. An activity that engages the students mind and hands to work together, which promotes understanding. It creates a foundation for more abstract thinking (15).

Finally, it is good to create mathematics learning activity-based to all-around development of students. Students have opportunities to learn. They use their free time in activities. They also invite other people to join in the work. The enthusiasm of the students to learn mathematics is evident to improve their life skills.

4.4 Conclusion:

The creation of knowledge in the classroom by students provides an opportunity to analyze the situation and its implications for the development of life skills. Structured learning activities help students develop a valid theory, related skills and draw conclusions. In addition to the above, the author also discusses some of the following strategies for developing life skills through an educational approach. A creative and responsible approach, connected to everyday life and providing challenging situations will help students learn life skills. Teachers should try to provide informal learning environments such as field work, opportunities to communicate with experts, organize research activities and improve their responsibilities.

The activity-based learning in mathematics was effective in getting students to think logically, mathematically and effectively. The presentation gives an opportunity to students to develop their social and communication skills. Some topics help with problem solving, communication and presentation skills.

Finally, it is beneficial to create activity-based math learning activities in the development of life skills.

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